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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/941,837
Filing Date: August 30, 2001
Appellant(s): PARK, SANG O.

David C. Oren
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed March 3, 2008 appealing from the Office action mailed June 18, 2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is substantially correct. The changes are as follows:

Claims **9, 10, 15, 20, and 24** should be included in section B as claims to be reviewed upon appeal that stand rejected under 35 USC § 103(a) over U.S. Patent 5,929,849 to Kikinis in view of Alba.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,282,713	Kitsukawa et al.	8-2001
5,929,849	Kikinis	7-1999
2002/0184627	Alba et al.	12-2002

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

1. Claims **1-4, 30** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitsukawa et al. in view of Alba et al.

Referring to claim **1**, Kitsukawa et al. discloses an apparatus for displaying broadcast information of a television, comprising:

- a broadcast service provider transmitting broadcast signals of each broadcast program including region information and specific information for each region (col. 5, l. 32-37), the region information indicating a region whereby specific information exists (col. 7, l. 16-20; col. 8, l. 31-34; & Fig. 5) and the specific information including a plurality of information data relating to an object included within a specific region (col. 9, l. 52-58; col. 10, l. 22-25; & Figs. 6, 7);
- a television receiver for receiving the broadcast signals transmitted from the broadcast service provider, video processing the received broadcast signals and displaying them through a screen, and displaying the specific information of a corresponding region when a user selects a certain region on the screen, wherein a position of a cursor is moved over the screen in accordance with movement of

an indicating device (col. 4, l. 20-24, 49-54; col. 7, l. 21-30; col. 9, l. 52-58 & Figs. 1-3).

Kitsukawa et al. does not disclose that the television receiver changes a shape or color of the cursor when the cursor is positioned within the specific region. Alba et al. discloses changing the configuration of a pointer/cursor 110 when a user moves the pointer/cursor 110 to the edge of a program matrix 108 to indicate to the user that alternate or additional information is available. Fig. 10A, for example, shows a cursor that has changed into an icon indicating that the program matrix 108 may be shifted by an entire page. Alba et al. further states that the configuration of the pointer/cursor is dependent on the location of the pointer/cursor (p. 6, paragraphs 93, 94). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the cursor of Kitsukawa et al. to change configuration depending on the location of the pointer/cursor, such as that taught by Alba et al. in order to provide an unobtrusive, user-friendly interface to available information.

Referring to claims **2** and **3**, the combination of Kitsukawa et al. and Alba et al. teaches the apparatus according to claim 1, wherein the television receiver includes:

- a TV controlling means for enabling the user to control TV functions and to select screen regions, wherein the TV controlling means includes a direction key or a track ball for selecting the screen region (Kitsukawa et al. col. 4, l. 46-54);
- a video processing unit for video processing the broadcast signals and the specific information corresponding to each region and for displaying the signals and information on the screen (Kitsukawa et al. col. 5, l. 46-48);

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- a memory unit for storing the region information and the specific information corresponding to each region (Kitsukawa et al. col. 5, l. 44-46); and
- a microcomputer for reading, from the memory unit, the specific information corresponding to the region of the screen selected by the user through the TV controlling means with reference to the region information and for outputting the information to the video processing unit (Kitsukawa et al. col. 6, l. 9-18).

Referring to claim **4**, the combination of Kitsukawa et al. and Alba et al. teaches the apparatus according to claim 2, wherein the television receiver further includes an Internet module enabling WEB site information included in the specific information to be read and processed through the screen (Kitsukawa et al. col. 8, l. 55-57).

Referring to claim **30**, the combination of Kitsukawa et al. and Alba et al. teaches the apparatus according to claim 1, wherein the television receiver displays a plurality of indexes, each index corresponding to one of the regions having specific information (Kitsukawa et al. col. 10, l. 15-28).

2. Claims **5, 6, 9-11, 13-22, 24-28** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kikinis in view of Alba et al.

Referring to claims **5, 6, 11, 13, 14, 16-19, 21, 22**, and **25-28**, Kikinis discloses a method/receiver of displaying broadcast information of a television, comprising the steps of:

- a broadcast service provider transmitting broadcast signals of each broadcast program including region information and specific information for each region, the specific information including a plurality of information data, including at

least a uniform resource locator (URL), relating to an object included within a specific region (col. 5, l. 34-35; col. 7, l. 14-17; col. 10, l. 45-67; col. 11, l. 1-19; & Figs. 2A-2C, 3A, 3B);

- receiving through a television receiver the broadcast signals transmitted from the broadcast service provider, video processing the received broadcast signals and displaying them through a screen, and storing the region information and the specific information for each region among the broadcast signals (col. 6, l. 33-58 & col. 9, l. 29-35);
- a user operating an indicating means to search a region on the screen and selecting a desired region, wherein the user operating the indicating means includes moving a position of a cursor in accordance with movement of the indicating means and displaying a video image of the region selected by the user or its corresponding specific information (col. 7, l. 57-65; col. 8, l. 1-37; & Figs. 2A-2C).

Kikinis further discloses enhancing an image in the display to indicate to the viewer that the dynamic image is a related region for access for further information (col. 8, l. 54-60). Kikinis does not disclose changing a shape or color of the cursor corresponding to the region of the screen where the cursor is positioned. Alba et al. discloses changing the configuration of a pointer/cursor 110 when a user moves the pointer/cursor 110 to the edge of a program matrix 108 to indicate to the user that alternate or additional information is available. Fig. 10A, for example, shows a cursor that has changed into an icon indicating that the program matrix 108 may be shifted by an entire page. Alba et al. further states that the configuration of the pointer/cursor is

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dependent on the location of the pointer/cursor (p. 6, paragraphs 93, 94). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the cursor of Kikinis to change configuration depending on the location of the pointer/cursor, such as that taught by Alba et al. in order to provide an unobtrusive, user-friendly interface to available information.

NOTE: The USPTO considers the appellant's "at least one of" language to be anticipated by any reference containing any of the subsequent corresponding elements.

Referring to claims **9**, the combination of Kikinis and Alba et al. teaches the method according to claim 5, wherein the step of displaying a video image of the region selected by the user or its corresponding specific information includes the step of displaying a video image of a region selected by the user on one side of the screen and displaying corresponding video related information on the rest of the screen (Kikinis col. 8, l. 1-22 & Fig. 2C).

Referring to claim **10**, the combination of Kikinis and Alba et al. teaches the method according to claim 5, wherein the step of displaying a video image of the region selected by the user or its corresponding specific information includes the step of connecting to an Internet WEB site corresponding to the video image of the selected region and displaying a corresponding screen image (Kikinis col. 8, l. 1-22 & Fig. 2C).

Referring to claims **15**, **20**, and **24**, the combination of Kikinis and Alba et al. teaches the method of claims 11, 16, and 21, respectively, further comprising undisplaying the supplemental information from the display screen when a return command is received from the user and redisplaying the image on the display screen (col. 8, l. 8-10).

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3. Claims **8**, **31** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kikinis in view of Alba et al. and further in view of Kitsukawa et al.

Referring to claims **8** and **31**, the combination of Kikinis and Alba et al. teaches the method according to claims 5 and 16, respectively, wherein the step of the user operating an indicating means to search a region on the screen and selecting a desired region includes the step of the user pressing a selection key on the indicating means to select the region (Kikinis col. 7, l. 56-65). The combination of Kikinis and Alba et al. does not teach the steps of displaying indexes on the regions defined by the region information among the regions of the screen and selecting a desired index from among the displayed indexes. Kitsukawa et al. discloses an advertising mark 720 for display on a screen. Following selection of the advertising mark 720, advertising information 704 corresponding to various items on the screen is superimposed over the program broadcast 702. The user then selects the advertising information for the item they are interested in (col. 10, l. 15-28). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the Kikinis' method of selecting a region in the combination of Kikinis and Alba et al. to include displaying advertising information corresponding to various items on the screen and allowing the user to select which of the items they are interested in, such as that taught by Kitsukawa et al. in order to better target supplemental information to a user's specific interests.

(10) Response to Argument

Regarding claims **1, 5, 11, 16, 21, and 25**, and the claims dependent on them, the appellant argues that the applied references do not teach or suggest the features of each of the respective claims. The examiner respectfully disagrees for the reasons discussed below.

Argument A: Independent Claim 1 Is Patentable Over Kitsukawa and Alba

Regarding claim **1**, the appellant argues that the combination of Kitsukawa et al. and Alba et al. does not teach or suggest changing a shape or color of a cursor when the cursor is positioned within the specific region in which the specific information exists regarding an object within the specific region. The examiner respectfully disagrees. Kitsukawa et al. discloses providing advertising information for items comprising products and services used in scenes of live and prerecorded television programs (col. 2, l. 19-24). The advertising information is received along with broadcasts of associated television programs (col. 6, l. 42-44). The viewer is alerted when advertising information is available for an item displayed in a scene of the television program broadcast (col. 7, l. 9-14). The viewer alert comprises a tone and at least one displayed mark (col. 7, l. 13-17). The displayed marks are indicators for each item for which advertising information is available (col. 7, l. 17-20). The user may select advertising information for a particular item by moving cursor or pointer to a corresponding advertising mark and selecting the mark (col. 8, l. 41-44 & Fig. 5-7). When selected, advertising information for the selected item is displayed along with the broadcast of the currently selected television program (col. 7, l. 10-38 & Figs. 5-7). The examiner interprets the displayed marks as “region information indicating a region whereby specific information exists” and interprets the advertising information that is displayed upon selection of a mark as “specific information

including a plurality of information data relating to an object included within a specific region,” as currently claimed.

Kitsukawa et al. does not specifically disclose that the television receiver changes a shape or color of the cursor when the cursor is positioned within the specific region. Alba et al. discloses a television control interface in which the configuration of a pointer/cursor 110 is changed when a user moves the pointer/cursor 110 to the edge of a program matrix 108. The pointer/cursor 110 normally appears as an arrow or triangle (p. 6, paragraph 92 & Fig. 1), but the configuration of the pointer/cursor is changed to indicate to the user when additional information is available (p. 6, paragraphs 93, 94). Figures 10A-10C, for example, show a cursor that has changed into an icon indicating that the program matrix 108 may be shifted by an entire page. Alba et al. further states that the configuration of the pointer/cursor is dependent on the location of the pointer/cursor (p. 6, paragraphs 93, 94). Since Kitsukawa et al. teaches moving a cursor on a screen to an indicator to select advertising information and Alba et al. teaches changing the configuration of a cursor when the cursor is positioned at certain location to indicate that additional information is available, the examiner maintains that the combination of Kitsukawa et al. and Alba et al. meet the limitation of changing “a shape or color of the cursor when the cursor is positioned within the specific region in which the specific information exists regarding the object within the specific region,” as currently claimed.

Further regarding claim 1, the appellant argues that it would not have been obvious to modify Kitsukawa et al.’s cursor as alleged and that the Office Action’s statement of obviousness is based on improper hindsight, since there is no suggestion in the prior art for the features and/or combinations. The examiner respectfully disagrees. The examiner recognizes

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that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Kitsukawa et al. states a need to provide innovative and user-friendly access available through a broadcasting system (col. 4, l. 15-24) and a need to enable a user to easily access and manipulate functions of the system (col. 6, l. 38-39). Kitsukawa et al. further discusses a need to alert a user when information is available (col. 7, l. 9-13). Alba et al. discloses using a cursor to select programs in a program guide to get more information (p. 2, paragraphs 31, 32). Alba et al. further discloses changing the configuration and shape of the pointer/cursor 110 depending on the location of the pointer/cursor on the screen (p. 6, paragraphs 92, 93). This is done to alert the user that alternate or additional information to the user (p. 6, paragraph 93). Alba et al. further indicates a need to facilitate easy access to a wide range of functionality through the combination of a limited number of user interactions (p. 1, paragraph 7). Given the similarity and analogous nature of the references and the motivation set forth in both references to provide a user-friendly interface, the examiner maintains that it would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the cursor of Kitsukawa et al. to change configuration depending on the location of the pointer/cursor, such as that taught by Alba et al. in order to provide a user-friendly interface to available information.

Still further regarding claim 1, the appellant argues that the examiner's conclusion of obviousness is based upon improper hindsight reasoning. The examiner respectfully disagrees.

It must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the appellant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Still further regarding claim 1, the appellant argues that Alba et al. does not suggest changing the shape or color of a cursor when the cursor is positioned within the specific region in which *the specific information exists regarding the object within the specific region* (italicized for emphasis). The examiner notes; however, that Kitsukawa et al. teaches moving a cursor over a region in which the specific information exists regarding the object within the specific region, as noted above. The examiner relies on Alba et al. to teach that it was well known within the prior art at the time that the invention was made to modify the shape of a cursor to alert a user that additional information is available on the basis of the cursor's location on a screen and that one would have been motivated to modify the cursor of Kitsukawa et al. in view of Alba et al. The fact that Alba et al. teaches changing the configuration of the cursor to indicate what a user should do to locate information not provided within a current program matrix is irrelevant, since the changing of configuration is dependent on screen location (p. 6, paragraph 93). Furthermore, Appellant's invention acts in a similar manner in that the shape or color of a cursor is changed to indicate that screen specific information is available for display, but the specific information is only displayed upon user selection (Figures 3-7 of Appellant's specification). That is, Appellant's invention is also indicating what a user should do to locate information that is not provided within a current display. As such, the examiner maintains that the combination of

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Kitsukawa et al. and Alba et al. teaches changing “a shape or color of the cursor when the cursor is positioned within the specific region in which the specific information exists regarding the object within the specific region,” as currently claimed.

Furthermore, as noted above, Kitsukawa et al. contains a device, which differs from the claimed device in that the cursor does not change shape or color when moved over a region of the screen having an interactive indicator, as discussed above. Alba et al. teaches changing the shape of a cursor when moved over a particular region of the screen to indicate that additional information exists, as discussed above. Given that Kitsukawa et al. and Alba et al. both involve providing user access to additional information using a cursor in a television interface, one of ordinary skill in the art could have substituted a cursor like that of Alba et al. for the cursor of Kitsukawa et al. to provide additional information in the indicator regions of display. As such, the claim would have been obvious, because the substitution of one known element for another would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

Argument A1: Dependent Claim 2 Is Patentable Over Kitsukawa and Alba

Regarding claim 2, the appellant argues that the combination of Kitsukawa et al. and Alba et al. does not teach that the television receiver includes a TV controlling means, a video processing unit for video processing the broadcast signals and the specific information corresponding to each region and for displaying the signals and information on the screen, a memory unit for storing the region information *and the specific information corresponding to each region*, and a microcomputer for reading, from the memory unit, the specific information corresponding to the region of the screen selected by the user through the TV controlling means

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with reference to the region information and for outputting the information to the video processing unit (*italicized for emphasis*). The examiner respectfully disagrees. Kitsukawa et al. discloses a cursor control user input device comprising a mouse, a trackball, or cursor direction keys for communicating direction information and command selections to the processor 109 (col. 4, l. 46-54). The examiner interprets this to be a “TV controlling means” as currently claimed. Kitsukawa et al. further discloses a CPU and MPEG decoder (Fig. 3) that causes advertising information to be superimposed or displayed alongside a television program broadcast in response to a viewer's selection (col. 7, l. 21-40 & Fig. 6). The examiner interprets this as “a video processing unit,” as currently claimed. Kitsukawa et al. also discloses a data buffer 51 that stores on-demand advertising data (col. 5, l. 44-46). The examiner interprets this to be “a memory unit,” as currently claimed. Kitsukawa et al. still further discloses a CPU that retrieves the advertising data from buffer 51 (col. 6, l. 9-18). The examiner interprets this to be “a microcomputer,” as currently claimed. As such, the examiner maintains that the combination of Kitsukawa et al. and Alba et al. meets the limitations of claim 2, as currently claimed.

Argument A2: Dependent Claim 3 Is Patentable Over Kitsukawa and Alba

Regarding claim 3, the appellant argues that the combination of Kitsukawa et al. and Alba et al. does not teach that the TV controlling means includes a direction key or a track ball for selecting screen regions. The examiner respectfully disagrees. Kitsukawa et al. discloses a cursor control user input device comprising a trackball or cursor direction keys for communicating direction information and command selections (col. 4, l. 49-54). As such, the

examiner maintains that the combination of Kitsukawa et al. and Alba et al. meets the limitations of claim 3, as currently claimed.

Argument A3: Dependent Claim 4 Is Patentable Over Kitsukawa and Alba

Regarding claim 4, the appellant argues that the combination of Kitsukawa et al. and Alba et al. does not teach that the television receiver further includes an Internet module enabling WEB site information included in the specific information to be read and processed through the screen. The examiner respectfully disagrees. Kitsukawa et al. discloses that the advertising information displayed for an item may include electronic links over the Internet to Web pages of product manufacturers and dealers (col. 8, l. 55-57). As such, the examiner maintains that the combination of Kitsukawa et al. and Alba et al. meets the limitations of claim 4, as currently claimed.

Argument A4: Dependent Claim 30 Is Patentable Over Kitsukawa and Alba

Regarding claim 30, the appellant argues that the combination of Kitsukawa et al. and Alba et al. does not teach that the television receiver displays a plurality of indexes, each index corresponding to one of the regions having specific information. The examiner respectfully disagrees. Kitsukawa et al. discloses that, upon selection of a car advertising indicator mark, the displayed advertising information comprises information for the car 731, the car tires 732, car detailing services 733, car repair services 734, the shirt 735, and the shorts 736. Following selection of the car tires advertising information, the car tire advertising information is displayed

(col. 10, l. 15-28 & Figs. 6, 7). As such, the examiner maintains that the combination of Kitsukawa et al. and Alba et al. meets the limitations of claim 30, as currently claimed.

Argument B: Independent Claim 5 Is Patentable Over Kikinis and Alba

Regarding claim 5, the appellant argues that the combination of Kikinis and Alba et al. does not teach or suggest changing a shape or color of the cursor when specific information exists corresponding to the region of the screen where the cursor is positioned, the specific information including at least a uniform resource locator (URL) associated with the object within the specific region. The appellant further argues that the combination of Kikinis and Alba et al. does not teach or suggest changing a shape or color of the cursor when specific information exists where the specific information includes at least a uniform resource locator (URL) associated with an object within the specific region. The examiner respectfully disagrees. The appellant specifically argues that Alba et al. merely discloses that a cursor may be changed into an additional information window.

Kikinis discloses linking URLs with regions in television presentations. A varying signal for providing a display on a display monitor is provided, comprising a first region comprising image information for a single frame for the display, and a second region separate from the first region, the second region comprising information relating a visual entity in the display provided by the information in the first region to an Internet Universal Resource Locator (URL). The second region may also comprise information relating the visual entity to a specific position in the single frame display (col. 2, l. 62-67 & col. 3, l. 1-4). Kikinis further discloses enhancing the region related to the URL with a special color, a halo, or an outline (col. 3, l. 5-9, 25-31; & col.

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4, l. 2-5, 30-34). When the user selects such regions, the linked URL is invoked, which leads to a WEB location providing information related to the region (col. 5, l. 17-25). Kikinis further discloses selecting such regions by manipulating a cursor to touch the region that has the associated URL and actuating a button on a remote (col. 7, l. 57-65 & col. 9, l. 44-53). Thus, Kikinis clearly discloses a way to inform a user that there is a URL associated with a region. Kikinis does not disclose changing a shape or color of a cursor when the cursor is positioned within the at least one interactive region; however, Alba et al. discloses changing the configuration of a pointer/cursor 110 when a user moves a pointer/cursor 110 over a particular portion of a screen (p. 6, paragraph 93 & Figs. 10A-10C).

Regarding Appellant's argument that Alba et al. merely discloses that a cursor may be changed into an additional information window and does not teach or suggest changing a shape or color of a cursor when specific information exists corresponding to the region of the screen where the cursor is positioned, the examiner notes that Alba et al. is not relied upon to teach that the address of the Internet Web site exists regarding an item within the at least one interactive region. As noted above, Kikinis discloses user-selectable regions of video frames that, when selected, invokes a linked URL, which leads to a WEB location providing information related to the region (col. 5, l. 17-25). Thus, Kikinis discloses positioning a cursor within an interactive region and the address of an Internet Web site exists regarding an item within the interactive region. Alba et al. discloses changing the configuration of a cursor/pointer to indicate additional information when the cursor/pointer is positioned in a particular location on the screen (p. 6, paragraph 93). The fact that Alba et al. teaches changing the configuration of the cursor to indicate what a user should do to locate information not provided within a current program

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matrix is irrelevant, since the changing of configuration is dependent on screen location (p. 6, paragraph 93). Furthermore, Appellant's invention acts in a similar manner in that the shape or color of a cursor is changed to indicate that screen specific information is available for display, but the specific information is only displayed upon user selection (Figures 3-7 of Appellant's specification). That is, Appellant's invention is also indicating what a user should do to locate information that is not provided within a current display. As such, the examiner maintains that the combination of Kikinis and Alba et al. suitably teaches changing a shape or color of a cursor when the cursor is positioned within the at least one interactive region and the address of the Internet Web site exists regarding an item within the at least one interactive region, as currently claimed.

Further regarding claim **5**, the appellant argues that there is no suggestion to combine the references. The examiner respectfully disagrees. The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Kikinis discloses enhancing an image related to a URL by a special color, enhanced brightness, or an outline to indicate to a viewer that the entity is associated with a URL (col. 3, l. 27-30 & col. 5, l. 22-25). Kikinis further discloses that other forms of enhancement are possible (col. 5, l. 25-26). User selection of the image is by cursor manipulation and selection with a pointer device (col. 4, l. 49-51; col. 5, l. 26-30; & col. 7, l. 41-47). Kikinis states a need for allowing a viewer to quickly and easily access

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information in detail about products advertised at a more general level, and about people and things of interest identified in TV transmissions and to provide a user-friendly ability to access the information (col. 2, l. 56-59 & col. 4, l. 56-59). Alba et al. discloses using a cursor to select programs in a program guide to get more information (p. 2, paragraphs 31, 32). Similar to Kikinis, Alba et al. discloses that when the pointer 110 is moved over an area in the program guide, the item may be automatically highlighted with a brighter color to indicate the viewer's location (p. 2, paragraph 34). When the user selects an item in a program guide, a related Internet site may be accessed (p. 4, paragraph 54 & p. 5, paragraphs 71, 72). Alba et al. further discloses changing the configuration and shape of the pointer/cursor 110 depending on the location of the pointer/cursor on the screen (p. 6, paragraphs 92, 93). This indicates alternate or additional information to the user (p. 6, paragraph 93). Given the similarity and analogous nature of the references and the motivation set forth in both references to provide a user-friendly interface, the examiner maintains that it be obvious to combine Kikinis and Alba et al.

Still further regarding claim 5, the appellant argues that the examiner's conclusion of obviousness is based upon improper hindsight reasoning; however, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the appellant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Furthermore, as noted above, Kikinis contains a device, which differs from the claimed device in that the cursor does not change shape or color when moved over an interactive region

of the screen, as discussed above. Alba et al. teaches changing the shape of a cursor when moved over a particular region of the screen to indicate that additional information exists, as discussed above. Given that Kikinis and Alba et al. both involve providing user access to additional information using a cursor in a television interface, one of ordinary skill in the art could have substituted a cursor like that of Alba et al. for the cursor of Kikinis to provide additional information when a user moves the cursor over an interactive object. As such, the claim would have been obvious, because the substitution of one known element for another would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

Argument B1: Dependent Claim 6 Is Patentable Over Kikinis and Alba

Regarding claim 6, the appellant argues that the combination of Kikinis and Alba et al. does not teach that the specific information for each region consists of at least one of video related information of a corresponding region and the Internet WEB site URL. The examiner respectfully disagrees. As noted previously with respect to claim 5 in Argument B, Kikinis teaches that the specific information contains URLs (col. 5, l. 17-25 & Figs. 2A, 2C). As such, the examiner maintains that the combination of Kikinis and Alba et al. meets the limitations of claim 6, as currently claimed.

Argument B2: Dependent Claim 8 Is Patentable Over Kikinis, Alba, and Kitsukawa

Regarding claim 8, the appellant argues that the combination of Kikinis, Alba et al., and Kitsukawa et al. does not teach that the user operating an indicating means includes the user

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pressing a selection key on the indicating means to select the region, displaying indexes on the regions defined by the region information among the regions of the screen, and selecting a desired index from among the displayed indexes. The examiner respectfully disagrees. As noted in the previous Office Action, the combination of Kikinis and Alba et al. does not teach the steps of displaying indexes on the regions defined by the region information among the regions of the screen and selecting a desired index from among the displayed indexes. Kitsukawa et al. discloses an advertising mark 720 for display on a screen. Following selection of the advertising mark 720, advertising information 704 corresponding to various items on the screen is superimposed over the program broadcast 702. The user then selects the advertising information for the item they are interested in (col. 10, l. 15-28). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify Kikinis' method of selecting a region in the combination of Kikinis and Alba et al. to include displaying advertising information corresponding to various items on the screen and allowing the user to select which of the items they are interested in, such as that taught by Kitsukawa et al. in order to better target supplemental information to a user's specific interests.

Argument B3: Dependent Claim 9 Is Patentable Over Kikinis and Alba

Regarding claim 9, the appellant argues that the combination of Kikinis and Alba et al. does not teach that the displaying includes displaying a video image of a region selected by the user on one side of the screen and displaying corresponding video related information on the rest of the screen. The appellant specifically argues that Kikinis' Figure 2C does not suggest displaying a video on one side of the screen and displaying corresponding video related

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information on the rest of the screen. The examiner respectfully disagrees. Figure 2C of Kikinis clearly shows displaying a video image on the left side of the screen and a home page related to the video image on the right side of the screen (col. 8, l. 1-22 & Fig. 2C). The claim language does not define how much of the rest of the screen displays corresponding video related information. As such, the examiner maintains that the combination of Kikinis and Alba et al. meets the limitations of claim 9, as currently claimed.

Argument B4: Dependent Claim 10 Is Patentable Over Kikinis and Alba

Regarding claim **10**, the appellant argues that the combination of Kikinis and Alba et al. does not teach that the displaying includes connecting to an Internet WEB site corresponding to the video image of the selected region and displaying a corresponding screen image. The examiner respectfully disagrees. Kikinis discloses retrieving a WEB page from a BMW WEB server after a user has selected the emblem 57 in the video (col. 7, l. 57-67; col. 8, l. 1-22; & Fig. 2C). As such, the examiner maintains that the combination of Kikinis and Alba et al. meets the limitations of claim 10, as currently claimed.

Argument C: Independent Claim 11 Is Patentable Over Kikinis and Alba

Regarding claim **11**, the appellant argues that the combination of Kikinis and Alba et al. does not teach or suggest changing a shape or color of the cursor when a stored uniform resource locator exists corresponding to the interactive image region in which the cursor is positioned. The examiner respectfully disagrees for the reasons stated with respect to Argument B above.

Further regarding claim **11**, the appellant argues that there is no motivation in the prior art to make the alleged combination. The examiner respectfully disagrees for the reasons stated with respect to Argument B above.

Still further regarding claim **11**, the appellant argues that the Office Action relies on impermissible hindsight in order to make the combination. The examiner respectfully disagrees for the reasons stated with respect to Argument B above.

Argument C1: Dependent Claim 13 Is Patentable Over Kikinis and Alba

Regarding claim **13**, the appellant argues that the combination of Kikinis and Alba et al. does not teach or suggest that the user selects the interactive region by locating the moveable cursor within the interactive image region and entering a selection command via a television (TV) control unit. The examiner respectfully disagrees. Kikinis discloses a viewer manipulating a cursor to touch the region of emblem 57 and then actuating a selection signal, such as pressing one of the buttons on the remote (col. 7, l. 57-67). As such, the examiner maintains that the combination of Kikinis and Alba et al. meets the limitations of claim 13, as currently claimed.

Further regarding claim **13**, the appellant argues that the combination of Kikinis and Alba et al. does not teach or suggest the features of changing a shape or color ... in which the cursor is positioned. The examiner respectfully disagrees for the reasons stated with respect to Argument B above.

Argument C2: Dependent Claim 14 Is Patentable Over Kikinis and Alba

Regarding claim **14**, the appellant argues that the combination of Kikinis and Alba et al. does not teach or suggest that the changes in shape or color of the moveable cursor indicates an existence of the supplemental information. The examiner respectfully disagrees for the reasons stated with respect to Argument B above.

Further regarding claim **14**, the appellant argues that the combination of Kikinis and Alba et al. does not teach or suggest that changes in shape or color indicates a plurality of informational data related to an object to be provided in the interactive image region. The examiner respectfully disagrees for the reasons stated with respect to Argument B above.

Argument C3: Dependent Claim 15 Is Patentable Over Kikinis and Alba

Regarding claim **15**, the appellant argues that the combination of Kikinis and Alba et al. does not teach or suggest undisplaying the supplemental information from the display screen when a return command is received from the user, and redisplaying the image on the display screen. The examiner respectfully disagrees. Kikinis discloses a viewer manipulating a cursor to touch the region of emblem 57 and then actuating a selection signal, such as pressing one of the buttons on the remote (col. 7, l. 57-67). In response, a WEB page is downloaded and displayed in a window 71 over the TV display (Fig. 2C). In this manner, window 71 can be closed whenever the viewer wishes (col. 8, l. 8-10). As such, the examiner maintains that the combination of Kikinis and Alba et al. meets the limitations of claim 15, as currently claimed.

Argument D: Independent Claim 16 Is Patentable Over Kikinis and Alba

Regarding claim **16**, the appellant argues that the combination of Kikinis and Alba et al. does not teach or suggest changing a shape or color of a cursor when the cursor is positioned within the at least one interactive region and the address of the Internet Web site exists regarding an item within the at least one interactive region. The examiner respectfully disagrees for the reasons stated with respect to Argument B above.

Further regarding claim **16**, the appellant argues that there is no motivation in the prior art to make the alleged combination. The examiner respectfully disagrees for the reasons stated with respect to Argument B above.

Still further regarding claim **16**, the appellant argues that the Office Action relies on impermissible hindsight in order to make the combination. The examiner respectfully disagrees for the reasons stated with respect to Argument B above.

Argument D1: Dependent Claim 17 Is Patentable Over Kikinis and Alba

Regarding claim **17**, the appellant argues that the combination of Kikinis and Alba et al. does not teach or suggest that the Internet Web site includes one or more Internet Web pages related an object included in the interactive image region. The examiner respectfully disagrees. In the Figure 2C example, Kikinis discloses that, during the BMW advertisement, the WEB page displays information including, for example, colors available, body styles, performance data, detailed pricing structure, sales and lease terms available, locations near the viewer where a demonstration drive may be accomplished, etc. (col. 7, l. 48-50 & col. 8, l. 23-37). Additionally, the viewer can access further information via Internet links in the WEB page (col. 8, l. 38-44).

As such, the examiner maintains that the combination of Kikinis and Alba et al. meets the limitations of claim 17, as currently claimed.

Argument D2: Dependent Claim 18 Is Patentable Over Kikinis and Alba

Regarding claim **18**, the appellant argues that the combination of Kikinis and Alba et al. does not teach or suggest that the address of the Internet Web site is a uniform resource locator (URL). The examiner respectfully disagrees. Kikinis discloses that the URL in the data region between frames of the TV transmission, associated with the BMW emblem is the WWW address for dial-up (col. 7, l. 65-67). As such, the examiner maintains that the combination of Kikinis and Alba et al. meets the limitations of claim 18, as currently claimed.

Argument D3: Dependent Claim 19 Is Patentable Over Kikinis and Alba

Regarding claim **19**, the appellant argues that the combination of Kikinis and Alba et al. does not teach or suggest that the user selects the interactive image the interactive image region by locating the interactive image region and entering a selection command via a television (TV) control unit. The examiner respectfully disagrees for the reasons stated with respect to Argument C1 above.

Argument D4: Dependent Claim 20 Is Patentable Over Kikinis and Alba

Regarding claim **20**, the appellant argues that the combination of Kikinis and Alba et al. does not teach or suggest undisplaying the contents of the Web site from the display screen when

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a return command is received from the user, and redisplaying the image on the display screen.

The examiner respectfully disagrees for the reasons stated with respect to Argument C3 above.

Argument D5: Dependent Claim 31 Is Patentable Over Kikinis, Alba, and Kitsukawa

Regarding claim **31**, the appellant argues that the combination of Kikinis, Alba et al., and Kitsukawa et al. does not teach or suggest displaying a plurality of indexes and selecting one of the indexes, wherein each index corresponds to one of a plurality of interactive image regions having an associated address of an Internet web site. The examiner respectfully disagrees for the reasons stated with respect to Argument B2 above.

Argument E: Independent Claim 21 Is Patentable Over Kikinis and Alba

Regarding claim **21**, the appellant argues that the combination of Kikinis and Alba et al. does not teach or suggest that the microprocessor changes a shape or color of a moveable cursor when the movable cursor is located within the interactive image region in order to indicate an existence of a uniform resource location associated with the object provided in the interactive image region. The examiner respectfully disagrees for the reasons stated with respect to Argument B above.

Further regarding claim **21**, the appellant argues that the applied references do not contain any teaching whereby the claimed features would have been obvious. The examiner respectfully disagrees for the reasons stated with respect to Argument B above.

Still further regarding claim **21**, the appellant argues that the Office Action relies on impermissible hindsight in order to make the combination. The examiner respectfully disagrees for the reasons stated with respect to Argument B above.

Argument E1: Dependent Claim 22 Is Patentable Over Kikinis and Alba

Regarding claim **22**, the appellant argues that the combination of Kikinis and Alba et al. does not teach or suggest that the user selects the interactive image region by locating the moveable cursor within the interactive image region and entering a selection command via a television (TV) control unit. The examiner respectfully disagrees for the reasons stated with respect to Argument C1 above.

Argument E2: Dependent Claim 24 Is Patentable Over Kikinis and Alba

Regarding claim **24**, the appellant argues that the combination of Kikinis and Alba et al. does not teach or suggest that the microprocessor further generates control signals for undisplaying the supplemental information and redisplaying the image on the display screen when a return command is received from the user. The examiner respectfully disagrees for the reasons stated with respect to Argument C3 above.

Argument F: Independent Claim 25 Is Patentable Over Kikinis and Alba

Regarding claim **25**, the appellant argues that the combination of Kikinis and Alba et al. does not teach or suggest that the microprocessor changes a shape or color of a cursor when the cursor is positioned within the interactive image region and a uniform address locator exists to

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obtain specific information regarding an object within the interactive image region. The examiner respectfully disagrees for the reasons stated with respect to Argument B above.

Further regarding claim **25**, the appellant argues that the applied references do not contain any teaching whereby the claimed features would have been obvious. The examiner respectfully disagrees for the reasons stated with respect to Argument B above.

Still further regarding claim **25**, the appellant argues that the Office Action relies on impermissible hindsight in order to make the combination. The examiner respectfully disagrees for the reasons stated with respect to Argument B above.

Argument F1: Dependent Claim 26 Is Patentable Over Kikinis and Alba

Regarding claim **26**, the appellant argues that the combination of Kikinis and Alba et al. does not teach or suggest that the Internet Web site includes one or more Internet Web pages related to the object within the interactive region. The examiner respectfully disagrees for the reasons stated with respect to Argument D1 above.

Argument F2: Dependent Claim 27 Is Patentable Over Kikinis and Alba

Regarding claim **27**, the appellant argues that the combination of Kikinis and Alba et al. does not teach or suggest that the address of the Web site is a uniform resource locator (URL). The examiner respectfully disagrees for the reasons stated with respect to Argument D2 above.

Argument F3: Dependent Claim 28 Is Patentable Over Kikinis and Alba

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Regarding claim **28**, the appellant argues that the combination of Kikinis and Alba et al. does not teach or suggest that the user selects the interactive image region by locating the cursor within the interactive image region and entering a selection command via a TV control unit. The examiner respectfully disagrees for the reasons stated with respect to Argument C1 above.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Michael Van Handel/

Examiner, Art Unit 2623

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